

**QUESTIONNAIRE FOR SITE ASSESSMENT OF RIVER VALLEY AND
HYDROELECTRIC PROJECTS**

1. General Information

- A. Site Information
- B. Geographical Location

Village/s	District/s	Tehsil/s	State/s

C. Latitude

D. Longitude

E. Elevation above Mean Sea Level

F. Total Area proposed for the Project (in ha.), if any

Forest area (in ha), if any

G. Nature of Terrain

H. Technical Classification of Soil (loam, sandy etc./aerial extent (ha.)

II. Existing land usage of the proposed project site area (in hectares)

		Total
i)Agriculture		
a) Irrigated		
b) Unirrigated		
ii)Homestead		
iii)Forest		
iv)Grazing		
v)Fallow		
vi)Water bodies		
vii)Marshes		

viii)Others(Pl. Specify)		
Total		

III. Alternate sites considered from the environment angle.

- A. _____
- B. _____
- C. _____
- D. _____

IV. Reason for selecting the proposed site from the environment angle.

V. Details of site

A. Seismicity

1. Whether the proposed dam site fall in seismically active area

Yes No

If yes

2. What is the seismic zone?

3. Whether any major landslide occurred in the past?

If yes,

(a) Frequency of occurrence/decade

(b) Area affected (ha)

(c) Population affected (nos.)

B. Sites likely to be submerged

1. Mineral bearing

S. No.	Name of the Mineral

2. Archaeological sites/monuments

S. No.	Sites/Monuments	Antiquity

3. Place of worship

S. No.	Place	Period of construction

VI. Objective of the project

- A. Irrigation(ha)
- B. Power generation (MW)
- C. Drinking water supply (cumecs)
- D. Industrial water supply (cu.m. /day)
- E. Flood control (area to be protected, in ha)
- F. Others (pl. specify)

VII. In case of Irrigation projects –

1. Existing Cropping pattern

S. No.	Crop	Existing Area (ha)	Productivity (tonnes/ha)

2. Water logging (ha)

3. Infiltration rate (cms /hour)

(at least for two locations in each of the major soil groups identified)

Major soil group				
Infiltration rate				

4. Saturated hydraulic conductivity for major soil groups (m/day) using in-situ auger hole/inverse auger hole method depending on depth of water table from the ground level within 2 meter or above 2 meters

VIII.

1. Sedimentation (hectare meter/sq.km/year)

Present rate

2. Length of river course which is likely to dry up due to impoundment (km)
3. In case of project where flow of water will be reduced due to withdrawal of water in between head race tunnel and tail race tunnel
- i) Length (metre)
- ii) Flow rate in river (m/sec)

IX. Whether any of the following exist within 7 km. of the project site. If so please indicate aerial distance from the periphery of submergence of the site and the name of the site.

S.No.	Name	Aerial Distance (in Km)
1.	National Park	
2.	Sanctuary/Tiger Reserve/Elephant Reserve	
3.	Core Zone & Buffer Zone of Biosphere Reserve	
4.	Habitat for migratory birds	
5.	Lakes/Reservoir/dams	
6.	Stream/Rivers	
7.	Estuary/Sea	
8.	Mountains/Hills	
9.	Archaeological sites	
10.	Archaeological sites listed in notification	
11.	Defence Installation	
12.	Industries/Thermal Power Plants	
13.	Municipal Corporation/Municipal Council/Nagarpanchayat (by whatever name it is known in the state)	
14.	Mangroves	
15.	Airports	
16.	Railway lines	
17.	National Highways	

X. Description of the vegetation (a) within project site (b) within 7m Km from the periphery of project site under following headings

- A. Agricultural crops_____
- B. Commercial crops_____
- C. Plantation_____
- D. Natural Vegetation/Forest Type (provide details)_____
- E. Grass lands_____
- F. Endangered species_____
- G. Endemic species_____
- H. Others (Please specify)_____

XI. Description of fauna within 7 Km under following headings.

- A. Rare and endangered species
- B. Species which require management
- C. Species of economic significance
- D. Species of special interest to local population or tourists
- E. Aquatic fauna of commercial/recreational value and migratory fish species along with their spawning ground
- F. Migratory route of terrestrial, aquatic as well as avi - fauna.

XII. In case of temporary construction

- A. Length of roads to be built
- B. Temporary sheds & Quarters
- C. Temporary office & residential buildings
- D. No. of people to be engaged

XIII. Annual average rain fall (in mm) _____

XV. Water Balance (cumecs)

- 1. Minimum flow observed over a period of time, and
- 2. Maximum flow observed over a period of time

XVI. Present Water use downstream. (cubic meter/sec)

S. No.	Usage	Present Consumption	
		Surface	Ground
1	Irrigation		
2.	Industry		
3.	Drinking		

4.	Other (Please specify)		
	Total		

XVII. Physico chemical analysis of Raw Water

XVIII. Pollution sources.

S.No.	Source	Around the periphery of submergence	At a distance of 7 Km from the pepriphery of submergence zone	In the catchment area	Within 7 Km in the stretch in which the river is likely to dry up
1.	Industry				
2.	Municipal waste/sewage				
3.	Mining				
4.	Beneficiation plants				
5.	Tail pond dams				
6.	Run off from ash ponds				
7.	Others (Pl. specify)				

XIX. Human settlement

Aerial distance from the periphery of the reservoir

	Upto 2000m from periphery of the reservoir	2000m to 5000m from periphery of the reservoir	5000m to 10000m from the periphery of the reservoir
Population			
Number of houses			
Present occupational pattern			

XX. Expenditure on Environmental Measures proposed at the time of survey and investigation

LIST OF DOCUMENTS TO BE ATTACHED WITH THE QUESTIONNAIRE IN RESPECT OF RIVER VALLEY AND HYDROELECTRIC PROJECTS.

1.	Topographic map of the main project site indicating contours (1:2500 scale)	
2.	Topographic map covering 7 Kms Radius indicating main features, ecologically sensitive areas, area to be submerged, main canal net work (in case of irrigation projects only), archeological sites, migratory route of wild animals	
3.	Contour map of location of dam indicating submerged areas	